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SUMMARY

The Island Local Integrating Organization (ILIO) in collaboration with Oregon State University's Human Dimensions Lab (HDL) co-produced a survey focused on (1) gauging Island County residents' natural resource values and (2) understanding residents' sense of place (SOP) and interactions with the county's shorelines. The survey was created following more than 2 years of ILIO-HDL collaboration focused on the integration of human wellbeing (HWB) into local ecosystem recovery planning. Through this work, ILIO determined broader community input was needed, as the ILIO sought to better understand what their community members value. The survey builds upon current trends within interdisciplinary social science approaches that emphasize communities, collaboration, and knowledge co-production (Djenontin and Meadow 2018; Shannon et al. 2020). Given Island County's extensive shoreline (195 miles) and regional significance for marine vegetation, notably eelgrass, and forage fish (ILIO 2017), additional shoreline questions were added. These shoreline questions stemmed from a separate HDL project focused on shoreline sense of place in the Puget Sound region (Trimbach 2021).

The survey instrument included **23 questions** and was distributed via Qualtrics survey software and through snowball sampling methodology (SSM). The survey was distributed through Island County and its local partners, including electronically and through outreach flyers. **A total of 327 residents responded to the survey between October-December 2020.** This report solely includes descriptive statistics stemming from survey responses. More advanced statistical analyses will be conducted for future publications.

Overall, respondents prioritized specific goals over others. For example, drinking water and beaches and marine vegetation were prioritized as top recovery goals. Respondents' values aligned with human wellbeing and ecosystem recovery goals. While specific goals were prioritized more than others, respondents also tend to agree that recovery goals are connected. Respondents also have a strong sense of place for the county's shorelines, where the majority have observed changes, including erosion and development. Respondents' connections to the shoreline is reflected in their frequent interactions and largely negative responses to shoreline change.

FINDINGS

RESIDENTS PRIORITIZE HUMAN WELLBEING AND ECOSYSTEM RECOVERY GOALS

Respondents were asked to identify and prioritize HWB and ecosystem recovery goals. These goals stem from the Puget Sound Partnership's <u>Vital Signs</u>, which are measures of ecosystem health and recovery. A lower mean indicates a higher priority.

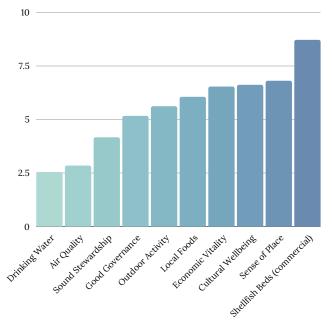


Figure 1. Respondents (N=316) prioritized the following HWB components: (1) drinking water; (2) air quality; and (3) sound stewardship.

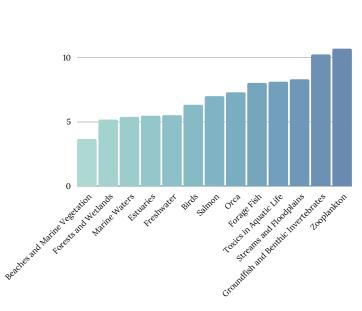


Figure 2. Respondents (n=315) prioritized the following ecosystem components: (1) beaches and marine vegetation; (2) forests and wetlands; and (3) marine waters.



ISLAND COUNTY'S NATURAL RESOURCE GOALS ARE WELL-ALIGNED WITH RESIDENTS' VALUES

86.43% of respondents (N=317) agreed (agree/strongly agree) that the highlighted natural resource goals reflected their values.

RESIDENTS UNDERSTAND THAT ISLAND COUNTY'S NATURAL RESOURCE GOALS ARE CONNECTED

Many respondents found it challenging to prioritize because as one respondent wrote: "I don't believe you can separate one item from another - it is **a deeply connected web** and when you tamper with one you affect another."



FINDINGS

RESIDENTS VALUE, POSSESS A STRONG SENSE OF PLACE FOR, AND FIND MEANING IN ISLAND COUNTY SHORELINES

Respondents were asked to state their level of agreement to the following aspects of sense of place, which generally refers to attachments, identities, and meanings associated with place (e.g., shorelines) (Trimbach et al. 2020). A higher mean indicates a higher sense of place.

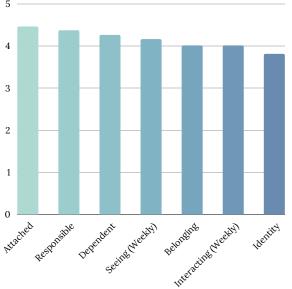


Figure 3. Respondents (N=318) indicated a high sense of place, including strong attachment, sense of responsibility, and dependence.

Compared to a recent 12-county Puget Sound survey (Trimbach 2021), Island County appears to have a greater sense of connection to the shorelines compared to regional residents.

Respondents were also asked to select up to 3 meaningful shoreline destinations. These destinations are represented by a heat map, which highlights those meaningful sites.

A "hotter" site indicates a more frequently selected site.

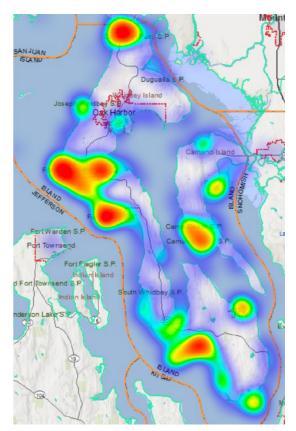
RESIDENTS' MOST MEANINGFUL SHORELINE SITES ARE PUBLIC PARKS

Figure 4. Respondents selected numerous sites including: Deception Pass State Park, Fort Ebey State Park, Fort Casey State Park, Double Bluff County Park, and Camano Island State Park.

RESPONDENTS WERE ALSO ASKED TO DESCRIBE **WHAT ISLAND COUNTY'S SHORELINES MEAN TO THEM.**SOME RESPONDENTS (N=195) RESPONDED WITH A RANGE OF MEANINGS, INCLUDING:



NatureConnectionBeachPeace(17%)(11%)(10%)(10%)



(34%)

FINDINGS

RESIDENTS HAVE OBSERVED SHORELINE CHANGE

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RESIDENTS HAVE OBSERVED SHORELINE CHANGE

69.6% of respondents (N=319) stated that they have observed county shoreline change ("Yes"), while 15.7% stated that they were not sure ("I don't know") and 14.5% stated they had not ("No").

RESIDENTS LARGELY PERCEIVE SHORELINE CHANGE AS NEGATIVE

44.2% of respondents stated that they feel negatively about shoreline change. Other responses included: 33.3% neutral; 12.8% positive; and 12.8% unsure ("I don't know").

Respondents also were asked to demonstrate what kind of changes they have observed and why they visit the county shoreline. They could choose more than one potential response.

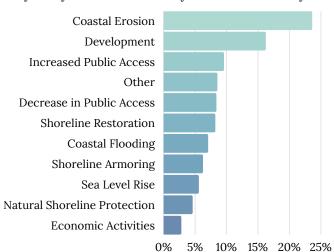
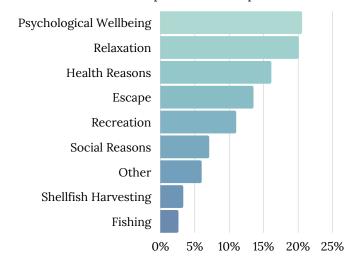


Figure 5. Coastal erosion and development were the more frequently selected change types. Other responses included litter and increased public use.



RESIDENTS VISIT SHORELINES FOR A RANGE OF REASONS

Figure 7. Psychological wellbeing (20.54%) and relaxation (20.06%) were the most frequently selected responses. Other responses included dog walking and picking up litter, among others.



RESIDENTS FREQUENTLY VISIT ISLAND COUNTY'S SHORELINES

51.10% of respondents (N=319) stated that they visit the shoreline weekly. Other notable responses included: 29.47% daily; 13.48% monthly; and 5.02% a few times a year.

CONCLUSIONS

CONCLUSIONS AND IMPLICATIONS

Based on the results, respondents identified and prioritized both human wellbeing (e.g., drinking water) and ecosystem recovery (e.g., beaches and marine vegetation) goals. While goals were prioritized, respondents also acknowledged that many goals were connected. Additionally, while these goals are diverse, respondents also largely agreed that these social and biophysical components were well-aligned with their values. Respondents also have a strong connection to the county's shoreline. This report and findings provide a glimpse at what a selection of residents think, feel, and value with regards to the local ecosystem. Key takeaways and implications are outlined below.

Key takeaways include:

- Residents understand that Island County's natural resource goals are connected.
- Island County's natural resource goals are well-aligned with residents' values.
- Residents highly value and prioritize Island County's shorelines.
- Residents have a strong sense of place to Island County's shorelines.
- Residents' most meaningful shoreline sites are public parks.
- Residents have observed shoreline change.
- Residents largely perceive shoreline change as negative.
- Residents frequently visit Island County's shorelines.
- Residents visit shorelines for a range of reasons, notably psychological wellbeing, health, and relaxation.

Implications of this survey and results vary. The survey process itself and lack of diverse input or participation illustrates the potential for new outreach and engagement with specific communities, notably Spanish-speaking residents in Island County. Results also illustrate the high value and significance of the county's shorelines for residents, specifically for a shared sense of place, use, and protection.

FUNDING

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METHODS

AND DEMOGRAPHICS

METHODS

A web-hosted survey via snowball sampling methodology (SSM) was conducted between October-December 2020. SSM is a form of non-probability and convenience sampling. While SSM has specific strengths, like gauging public perceptions, addressing divisive topics, and reaching minority communities (Trimbach 2016), it also has limitations, including a less generalizable and representative sample. The survey included 327 adults aged 18 and older who currently reside (full-time and part-time) in Island County, Washington. The survey was implemented through Qualtrics, a survey software. Survey questions included those focused on identifying and prioritizing ecosystem recovery goals, both human wellbeing and biophysical goals, and shoreline sense of place and interactions. The survey included 23 questions, including closed-ended and open-ended questions. Questions and responses were also partly edited and co-created with HDL and ILIO partners. Question content was partly borrowed from the Puget Sound Partnership's Vital Signs, which are social and biophysical measures of ecosystem health and recovery. Other questions were partly borrowed from ongoing regional sense of place research (Trimbach et al. 2020; Trimbach 2021). The findings highlighted in this brief report include partial preliminary descriptive statistics (frequencies) of these data. More advanced analyses will be completed for future publications.

RESPONDENT DEMOGRAPHICS

Respondents (n=327) included both males (49.84%) and females (49.22%) and residents aged 18 to 80 and older; although most respondents were 60 and older (76.91%). Respondents also included residents from different racial and ethnic groups, with the majority being white (90.30%). Respondents also included: full-time (92.79%) and part-time (7.21%) residents; shoreline property owners (26.71%) and non-shoreline property owners (73.29%); and residents with a length of residency ranging from less than 1 year (5.38%) to more than 20 years (28.16%). Some demographic patterns partly reflect those of Island County, including having a predominantly white population (85.2%) and residents who are older than the state average, which is linked to the area being a destination for retirees (Gurthrie 2017; U.S. Census Bureau 2019). Extra attention was directed at Spanish-speaking residents; however, this effort was not successful.

REFERENCES

REFERENCES

Djenontin, I. N. S. and Meadow, A. M. 2018. The art of co-production of knowledge in environmental sciences and management: lessons from international practice. *Environmental Management*. 61: 885-903.

ILIO. Ecosystem Recovery Plan. 2017. Available at: https://www.islandcountywa.gov/Health/DNR/ILIO/Documents/Island_LIO_Plan_2017-06-20_%20FINAL.pdf

Guthrie, P. 2017. Aging well on Whidbey: Island County residents live longer. Herald Net. 9 July. Available at: https://www.heraldnet.com/life/aging-well-on-whidbey-island-county-residents-live-longer/

Puget Sound Partnership. Puget Sound Vital Signs. Available at: https://vitalsigns.pugetsoundinfo.wa.gov

Shannon et al. 2020. Community geography: Toward a disciplinary framework. *Progress in Human Geography*. DOI: 10.1177/0309132520961468

Trimbach, D. J. 2016. Understanding Narva and Identity: Local Reflections from Narva's Russian-speakers. Baltic Worlds. 1-2: 4-12.

Trimbach, D. J., Fleming, W., and Biedenweg, K. 2020. Whose Puget Sound?: Examining Place Attachment, Residency, and and Stewardship in the Puget Sound Region. *Geographical Review*. DOI: 10.1080/00167428.2020.1798763

Trimbach, D. J. 2021. Sensing Liminal Landscapes in Puget Sound. GeoJournal. DOI: 10.1007/s10708-020-10350-w

U.S. Census Bureau. 2019. QuickFacts: Island County, Washington. Available at: https://www.census.gov/quickfacts/fact/table/islandcountywashington,WA/PST 045219